Biological Briefs

BANKS, W. J. *Doves of War.* Fauna 5: 98–101. December, 1943.

Homing pigeons are saving lives and performing valuable messenger duties for the Allies. The feats of several pigeon heroes have been recognized in Dieppe, North Africa, and Guadalcanal. Pigeons were domesticated 5,000 years ago in Egypt, and were used as messengers by Solomon, the ancient Persians, and the Greeks. The development of fine homing breeds, however, waited until the 19th century, when they served to carry bank quotations and news. In the present conflict, pigeons carry messages from patrol and reconnaissance planes, from raiding parties, and from disabled planes, where radio would reveal information to the enemy. Private owners have turned over valuable stocks to the U. S. Signal Corps for the duration. Intensive breeding and improved training methods are constantly raising the level of performance. Homing flights of more than 200 miles and average speeds of 70 miles per hour are often made, and now birds are trained to return to mobile lofts in a truck or trailer. To prevent the carrying of messages to the enemy, all pigeons in England have been inspected and forced to fly; for the same reason, the Germans have killed thousands of birds in occupied lands. The dove of peace is now all out for war.

DAVIS, ELRICK B. *Tree Rings for Victory.* Nature Magazine 36: 483–484; 500. November, 1943.

Long-time weather forecasting is of great value in planning campaigns, and here is one of the realms in which tree-ring study is of value. Tree growth may be correlated with weather conditions, which in turn depend to some extent on the 11-year sunspot cycle. By correlating such studies on trees from various parts of the world, a global weather history charting a basic pattern of weather "velocity" and trends may be made. The forest operator also uses tree rings to study the best conditions for tree growth and the most economic time to harvest in sustained-yield "tree farming." Without damage to the living tree, an increment borer obtains a core showing growth rings. Each tree species has its optimum elevation above sea level; some grow best in pure stands, others in mixed groves. Differences in soil types and in amounts of average moisture likewise show their effects in tree rings.

WING, ANDREW S. *The Insect Battle-Front.* Nature Magazine 37: 36–37; 48. January, 1944.

Insecticides are aids in the present struggle, not only in our gardens but on the battle-front. To help compensate for the loss of over half our supplies of derris-root (the main source of rotenone) from the South Pacific islands, Central and South America are developing greater yields of their rotenone-producing plants. Improved derris plants in Puerto Rico are giving high yields, while in South America the lance-fruit is being propagated and may prove an even better source of this insecticide. Pyrethrum, the toxic principle of a daisy-like flower, was produced formerly in Dalmatia; now it comes to us from Kenya, British East Africa. If its cultivation could be made commercially profitable, it could be grown in the United States. It is of wide use on the fighting front against disease-bearing insects. Nicotine sulfate, a tobacco by-product, is valuable mainly against sucking insects attacking plants. The mineral cryolite (sodium fluoaluminate) is a good substitute for the more toxic lead arsenate. These poisons are safe to use in the home garden if directions are carefully followed. Particular emphasis should be placed on using all dusts and sprays early in the season for greatest effectiveness.

RUTH SHERMAN STEIN

INDEX TO VOLUME 6